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(72) Inventor; and
(71) Applicant : **MAHAJAN MAHESH DATTATRAY** [IN/IN]; R.S.No. 112/1, Datt Kaju Nagar, Murgud Road, Nipani - 591 237, Karnataka (IN).

(74) Agent: **DEWAN, Mohan**; R.K. Dewan & Company, Trade Mark & Patent Attorneys, Podar Chambers, S.A. Belvi Road, Fort Mumbai 400 001, Maharashtra (IN).

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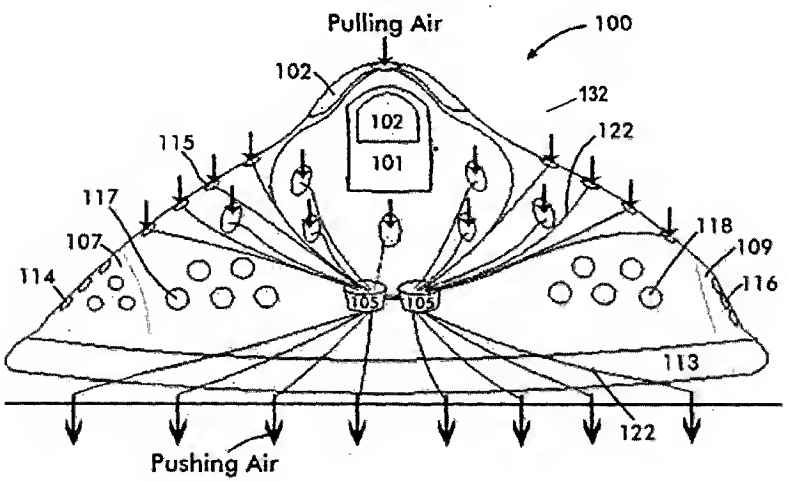



(57) Abstract: An air-thrust vehicle (100) includes a base (130) and an inverted saucer shaped body (132) mounted on the base (130). A plurality of sets of apertures (114, 115, 116, 117, 118, 119, 120, 121) is defined at a plurality of pre-determined locations on the base (130) and the saucer shaped body (132). A plurality of air-displacement mechanisms (105) is configured to draw air via pre-determined sets of apertures and force air via other pre-determined sets of apertures for providing lift for forward and backward movement and for providing horizontal pivoting of the vehicle (100) on the base. A plurality of ducts (122) is adapted to operatively connect the air-displacement mechanisms (105) to each aperture of the sets of apertures (114, 115, 116, 117, 118, 119, 120, 121) and an engine (106) is coupled to operate the air-displacement mechanisms (105).

WO 2014/049607 A1

# AIR-THRUST VEHICLE

## FIELD OF THE DISCLOSURE

The present disclosure relates to the field of airborne vehicles.

## BACKGROUND

Presently, roadways are extensively used for transportation of goods as well as for commuting by people. This is because roadways provide a cost effective method of transportation over other modes of transportation. Hence, over the past few years, there has been a continuous increase in the number of vehicles plying on roads. As a result, roads are becoming increasingly congested. Road congestion causes wastage of valuable time. Further, fuel consumption of land vehicles increases during congestion, thereby increasing operational cost of the land vehicles and also causes environmental pollution.

In order to overcome the problems associated with roadways, alternate mode of transportation by air has been developed with the advent of airplanes. However, commuting by airplanes involve high cost and requires specific location for landing and take-off. Further, airplanes are operated on fossil fuel which causes environmental pollution.

There is thus felt a need for eliminating the problems associated with the presently available modes of transportation.

## OBJECTS

Some of the objects of the present disclosure which at least one embodiment is adapted to provide, are described herein below:

An object of the present disclosure is to provide an air-thrust vehicle having a low production cost.

Another object of the present disclosure is to provide an air-thrust vehicle that does not require wings to fly.

Still another object of the present disclosure is to provide an air-thrust vehicle that can operate on any category of airfield.

Yet another object of the present disclosure is to provide an air-thrust vehicle that is easy to drive.

Still a further object of the present disclosure is to provide an air-thrust vehicle with reduced operational cost.

Other objects and advantages of the present disclosure will be apparent from the following description when read in conjunction with the accompanying figures, which are not intended to limit the scope of the present disclosure.

## SUMMARY

In accordance with an embodiment of the present disclosure, there is provided an air-thrust vehicle. The air-thrust vehicle includes

- a base;
- an inverted saucer shaped body mounted on the base;
- a plurality of sets of apertures defined at a plurality of pre-determined locations on the base and a plurality of sets of apertures defined at a plurality of pre-determined locations on the saucer shaped body;
- a plurality of air-displacement mechanisms configured to draw air via pre-determined sets of apertures and force air through other pre-determined sets of apertures for providing lift for forward and backward movement and for providing horizontal pivoting of the vehicle on the base;
- a plurality of ducts adapted to operatively connect the air-displacement mechanisms to each aperture of the sets of apertures; and
- an engine coupled to operate the air-displacement mechanism.

Typically, the plurality of pre-determined locations are selected from the group consisting of front side, upper side, back side, front left side, rear left side, front right side, rear right side and bottom side.

The air-displacement mechanism is selected from the group consisting of an axial compressor, a booster, a blower and a gas turbine.

Typically, the air-displacement mechanism is configured to draw air via set of apertures defined at said upper side and force air via set of apertures defined at the bottom side for providing the lift to the air-thrust vehicle.

Typically, the air-displacement mechanism is configured to draw air via set of apertures defined at said front side and force air via set of apertures defined at the back side for providing the forward movement to the air-thrust vehicle.

Typically, the air-displacement mechanism is configured to draw air via set of apertures defined at the front left side and force air via set of apertures defined at the rear left side for turning the air-thrust vehicle in operative left direction.

Additionally, the air-displacement mechanism is further configured to draw air via sets of apertures defined at the front left side and the rear right side of the air-thrust vehicle and force the air via sets of apertures defined at the front right side and the rear left side for turning the air-thrust vehicle in operative left direction.

Typically, the air-displacement mechanism is further configured to draw air via set of apertures defined at the front right side and force air via set of apertures defined at the rear right side for turning the air-thrust vehicle in operative right direction.

Additionally, the air-displacement mechanism is configured to draw air via sets of apertures defined at the front right side and the rear left side of the air-thrust vehicle and force air via sets of apertures defined at the front left side and the rear right side for turning the air-thrust vehicle in operative right direction.

Typically, the air-displacement mechanism is configured to draw air via sets of apertures defined at the front left side and the rear left side of the air-thrust vehicle and force the air via sets of apertures defined at the front right side and the rear right side for moving the air-thrust vehicle in operative left direction.

Typically, the air-displacement mechanism is configured to draw air via sets of apertures defined at the front right side and the rear right side of the air-thrust vehicle and force air via sets of apertures defined at the front left side and the rear left side for moving the air-thrust vehicle in operative right direction.

Typically, the air-displacement mechanism is configured to draw air via set of apertures defined at the back side and force air via set of apertures defined at the front side for providing the backward movement to the air-thrust vehicle.

Typically, the sets of apertures are provided with an air filter.

Further, the air-thrust vehicle includes a rubber coating covering at least a portion of the body and the base.

In accordance with another embodiment of the present disclosure, the air-thrust vehicle further includes a window glass disposed on at least a portion of the body.

Typically, the air-thrust vehicle is having a centre of gravity located at the centre point of the base.

Additionally, the air-thrust vehicle may be adapted to accommodate at least one passenger.

## BRIEF DESCRIPTION OF THE ACCOMPANYING DRAWINGS

The disclosure will now be described with the help of the accompanying drawings, in which:

Figure 1A illustrates a side view of an air-thrust vehicle depicting the air-displacement mechanism providing lift for upward movement of the air-thrust vehicle in accordance with an embodiment of the present disclosure;

Figure 1B illustrates a perspective side view of the air-thrust vehicle depicting the air-displacement mechanism providing lift for upward movement of the air-thrust vehicle of figure 1A;

Figure 1C illustrates a bottom view of the air-thrust vehicle depicting the air-displacement mechanism providing lift for upward movement of the air-thrust vehicle of figure 1A;

Figure 2A illustrates the side view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for forward movement of the air-thrust vehicle of figure 1A;

Figure 2B illustrates a front view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for forward movement of the air-thrust vehicle of figure 1A;

Figure 2C illustrates a back view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for forward movement of the air-thrust vehicle of figure 1A;

Figure 3A illustrates the side view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for turning the air-thrust vehicle in an operative left direction;

Figure 3B illustrates a top view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for turning the air-thrust vehicle in the operative left direction;

Figure 3C illustrates the top view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for turning the air-thrust vehicle in the operative left direction;

Figure 4A illustrates the side view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for turning the air-thrust vehicle in an operative right direction;

Figure 4B illustrates the top view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for turning the air-thrust vehicle in the operative right direction;

Figure 4C illustrates the top view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for turning the air-thrust vehicle in the operative right direction;

Figure 5A illustrates the side view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for the movement of the air-thrust vehicle in the operative left direction;

Figure 5B illustrates the top view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for the movement of the air-thrust vehicle in the operative left direction;

Figure 6A illustrates the side view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for the movement of the air-thrust vehicle in the operative right direction;

Figure 6B illustrates the top view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for the movement of the air-thrust vehicle in the operative right direction;

Figure 7A illustrates the side view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for the backward movement of the air-thrust vehicle of figure 1A;

Figure 7B illustrates the front view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for the backward movement of the air-thrust vehicle of figure 1A;

Figure 7C illustrates the back view of the air-thrust vehicle depicting the air-displacement mechanism providing thrust for the backward movement of the air-thrust vehicle of figure 1A;

Figure 8A illustrates a perspective front view of the air-thrust vehicle depicting the disposition of air filters on a plurality of apertures defined on the air-thrust vehicle of figure 1A;

Figure 8B illustrates a back view of the air-thrust vehicle depicting the disposition of air filters on a plurality of apertures defined on the air-thrust vehicle of figure 1A;

Figure 9A illustrates a perspective side view of the air-thrust vehicle depicting a rubber coating on a body and base of the air-thrust vehicle of figure 1A;

Figure 9B illustrates a bottom view of the air-thrust vehicle depicting the rubber coating on the base of the air-thrust vehicle of figure 1A;

Figure 10A illustrates the side view of the air-thrust vehicle depicting the arrangement of the window glass on the body of the air-thrust vehicle of figure 1A;

Figure 10B illustrates the bottom view of the air-thrust vehicle depicting the arrangement of the window glass on the base of the air-thrust vehicle of figure 1A;

Figure 11A illustrates the side view of the air-thrust vehicle depicting the position of center of gravity of the air-thrust vehicle of figure 1A;

Figure 11B illustrates the bottom view of the air-thrust vehicle depicting the position of center of gravity of the air-thrust vehicle of figure 1A;

Figure 12A illustrates the seating arrangement for the passengers inside the air-thrust vehicle in accordance with an embodiment of the present disclosure;

Figure 12B illustrates the seating arrangement for the passengers inside the air-thrust vehicle in accordance with another embodiment of the present disclosure;

Figure 13A illustrates the perspective side view of the air-thrust vehicle depicting the comprehensive structure of the air-thrust vehicle of figure 1A;

Figure 13B illustrates the top view of the air-thrust vehicle depicting the comprehensive structure of the air-thrust vehicle of figure 1A;

Figure 14 illustrates a diagram of the air-displacement mechanism utilized by the air-thrust vehicle of figure 1A;

Figure 15A illustrates a schematic diagram of the air-thrust vehicle depicting the connection of the air-displacement mechanism with the plurality of apertures; and

Figure 15B illustrates the bottom view of the air-thrust vehicle depicting the connection of the air-displacement mechanism with an engine;

## DETAILED DESCRIPTION

The air-thrust vehicle of the present disclosure will now be described with reference to the embodiments which do not limit the scope and ambit of the disclosure. The description relates purely to the exemplary preferred embodiments of the disclosed system and its suggested applications.

The system herein and the various features and advantageous details thereof are explained with reference to the non-limiting embodiments in the following description. Descriptions of well-known components and processing techniques are omitted so as to not unnecessarily obscure the embodiments herein. The examples used herein are intended merely to facilitate an understanding of ways in which the embodiments herein may be practiced and to further enable those of skill in the art to practice the embodiments herein. Accordingly, the examples should not be construed as limiting the scope of the embodiments herein.

The air-thrust vehicle as envisaged by the present disclosure is basically an air vehicle capable to fly in the air based on the thrust generated by the forced displacement of the air in a particular direction. The plurality of air-displacement mechanism is utilized to draw and expel air via plurality of apertures to provide lift for the movement of the air-thrust vehicle.

The air-thrust vehicle of the present disclosure will now be explained with reference to Figure 1A through Figure 15B with key components referenced generally as illustrated in the figures.

The air-thrust vehicle **100** includes a saucer shaped body **132** mounted on a base **130**. The air-thrust vehicle **100** further includes a plurality of sets of apertures defined at a plurality of locations on the body **132**, wherein a set of apertures **114** is defined on a front side portion **107**, a set of apertures **115** is defined on an upper side portion **108**, a set of apertures **116** is defined on a back side portion **109**, sets of apertures **117** and **118** are defined on a left side portion **110**, and sets of apertures **119** and **120** are defined on a right side portion **111** of the body **132**. Further, a set of apertures **121** is defined on a bottom side **112** of the base **130**.

The air-thrust vehicle **100** includes a plurality of air-displacement mechanism **105** disposed within the body **132** and is operatively connected to the plurality of sets of apertures via a plurality of ducts **122**. Typically, the air-displacement mechanism is a blower. The air-displacement mechanism is not limited to a blower and an axial compressor, a booster and a gas turbine may be used for the displacement of air. The air-displacement mechanism **105** is used to generate lift for the upward and backward movement of the air-thrust vehicle **100** and the horizontal pivoting of the air-thrust vehicle **100** on the base **130**.

Figures 1A, 1B and 1C illustrate an upward movement of the air-thrust vehicle **100** due to the lift generated by the air-displacement mechanism **105**. As shown in figure 1A, the air-displacement mechanism **105** draws air from the set of apertures **115** via the plurality of ducts **122** and force the air through the set of apertures **121** via the plurality of ducts **122**. Due to forced pushing of the air through the set of apertures **121** defined on the bottom side **112** of the base **130** (as shown in figure 1B and 1C), a force of equal magnitude but opposite in direction acts on the bottom side **112** of the base **130**, thereby lifting the vehicle in an upward direction.

Figures 2A, 2B and 2C illustrate a forward movement of the air-thrust vehicle **100** due to thrust developed by the air-displacement mechanism **105**. As shown in figure 2A and 2B, the air-displacement mechanism **105** draws air from the set of apertures **114** via the plurality of ducts **122** and force the air through the set of apertures **116** via the plurality of ducts **122**. Due to pushing of air through the set of apertures **116** defined on the back side portion **109** of the body **132** (as shown in figure 2C), a reaction force acts on the back side portion **109** of the air-thrust vehicle **100**, thereby providing a movement to the air-thrust vehicle **100** in a forward direction.

Figures 3A, 3B and 3C illustrate a turning movement of the air-thrust vehicle **100** in the operative left direction. In accordance with one embodiment of the present disclosure, the air-displacement mechanism **105** draws air from the set of apertures **117** defined at the front position of the left side portion **110** and force the air from the set of apertures **118** defined at the rear position of the left side portion **110** (as shown in figure 3A & 3C), thereby providing a force for turning the air-thrust vehicle **100** in the operative left direction. In accordance with another embodiment of the present disclosure, the air-displacement mechanism **105** draws air from the set of apertures **117** defined at the front position of the left side portion **110** and the set of apertures **120** defined at the rear position of the right side portion **111**(as shown in figure 3B ). The air-displacement mechanism **105** force the air through the set of apertures **119** defined at the front position of the right side portion **111** and through the set of apertures **118** defined at the left side portion **110**. Due to pushing of the air through the above mentioned set of apertures, a thrust acts on the front position of the right side portion **111** and the rear position of the left side portion **110**, thereby turning the air-thrust vehicle in the operative left direction.

Figures 4A, 4B and 4C illustrate the turning movement of the air-thrust vehicle **100** in the operative right direction. In accordance with one embodiment of the present disclosure (as shown in figure 4A), the air-displacement mechanism **105** draws air from the set of apertures **118** and force the air through the set of apertures **117** for turning the air-thrust vehicle **100** in the operative right direction. In accordance with another embodiment of the present disclosure (as shown in figure 4C), the air-displacement mechanism **105** draws air from the set of apertures **119** and force the air through the set of apertures **120** for turning the air-thrust vehicle **100** in the operative right direction.

In accordance with another embodiment of the present disclosure (as shown in figure 4B), the air-displacement mechanism **105** draws air from the set of apertures **119** and the set of apertures **118** and force the air through the set of apertures **117** and the set of apertures **120**. Due to forcing of the air through the aforementioned set of apertures, an equal and opposite force acts on the rear position of the right side portion **111** and the front position of the left side portion **110**, thereby turning the air-thrust vehicle **100** in the operative right direction.

Figures 5A and Figure 5B illustrate the movement of the air-thrust vehicle **100** in the operative left direction. The air-displacement mechanism **105** draws air from the set of apertures **117** and the set of apertures **118** and force the drawn air through the set of apertures **119** and the set of apertures **120**, thereby generating the thrust that enables the movement of the air-thrust vehicle **100** in the operative left direction.

Figures 6A and Figure 6B illustrate the movement of the air-thrust vehicle **100** in the operative right direction. The air-displacement mechanism **105** draws air from the set of apertures **119** and the set of apertures **120** and force the drawn air through the set of apertures **117** and the set of apertures **118**, thereby generating the thrust that enables the movement of the air-thrust vehicle **100** in the operative right direction.

Figures 7A, 7B and 7C illustrate the backward movement of the air-thrust vehicle **100**. As shown in figure 7A, the air-displacement mechanism **105** draws air from the set of apertures **116** via the plurality of ducts **122** and force the air through the set of apertures **114** via the plurality of ducts **122**. Due to pushing of air through the set of apertures 114 defined on the front side portion **107** of the body **132** (as shown in figure 7C and 7B), a reaction force acts on the front side portion **107** of the air-thrust vehicle **100**, thereby moving the air-thrust vehicle **100** backward.

In accordance with an embodiment of the present disclosure, the apertures are provided with an air filter **103**, typically a net cap (as shown in figure 8A and figure 8B) for prohibiting the suction of air-bags, papers and other waste products by the air-displacement mechanism **105**.

In accordance with another embodiment of the present disclosure, a rubber coating is provided on the bottom side **112** of the base **130** and on the surrounding lower portion of the body **132** of the air-thrust vehicle **100** (as shown in figures 9A and 9B) for protecting the air-thrust vehicle **100** from electric currents in case it comes into contact of any electric pole and to prevent the body **132** to come into contact of any object present on the earth surface.

In accordance with another embodiment of the present disclosure, the air-thrust vehicle **100** comprises a window glass **102** (as shown in figure 10A and 10B) disposed on the body **132** and on the bottom side **112** of the base **130**. The window glass **102** is typically used for enabling the user to get the view of ground and surroundings. Further, the window glass **102** is provided to protect occupants of the vehicle from wind and flying debris such as dust, insects, and rocks.

In accordance with another embodiment of the present disclosure, the center of gravity of the air-thrust vehicle **100** is located at the center point **126** of the base **130** (as shown in figure 11A and 11B) for providing the appropriate balance to the air-thrust vehicle **100** during the flight.

In accordance with another embodiment of the present disclosure, the air-thrust vehicle has a seating arrangement **129** for facilitating the seating of at least one passenger **127** (as shown in figure 12A and 12B).

Figure 13A and Figure 13B illustrate the comprehensive outer structure of the air-thrust vehicle **100** depicting the arrangement of net caps **103** on the apertures defined on the body **132** and the base **130**, rubber coating on the body **132** and the base **130**, a bumper **113** and disposition of a door **101** on the body **132** of the air-thrust vehicle **100**.

Figure 14 illustrates a diagram of the air-displacement mechanism **105** utilized by the air-thrust vehicle **100**. The air-displacement mechanism **105** includes the rotatory and stationary components, typically rotor blades **123** and the stator blades **124**. The plurality of ducts **122** are connected to the air-displacement mechanism **105** at both the ends for facilitating the inlet and outlet of air flow.

Figure 15A and Figure 15B illustrate the connection of the air-displacement mechanism **105** with the plurality of apertures and with an engine **106**. The air-displacement mechanism **105** is operated by the engine **106**, typically an electric motor is used. The engine **106** is not limited to the electric motor and any conventional engine utilizing a fossil fuel may be used to operate the air-displacement mechanism **105**.

The air-thrust vehicle of the present disclosure does not have wheels, gearbox, suspensions and wing structures, thereby having reduced production cost. Moreover, the air-thrust vehicle of the present disclosure is movable on any type of surface and is capable of take-off and landing on unimproved airfields. The air-thrust vehicle of the present disclosure is easy to drive, has low fuel consumption due to reduced weight and has an effective balancing during the flight, thereby rendering the vehicle economical and safe.

## TECHNICAL ADVANCEMENTS AND ECONOMIC SIGNIFICANCE

The technical advantages of the system envisaged by the present disclosure include the realization of:

- an air-thrust vehicle having a low production cost;
- an air-thrust vehicle that does not require wings to fly;
- an air-thrust vehicle that can operate on any category of airfield;
- an air-thrust vehicle that is easy to drive; and
- an air-thrust vehicle with reduced operational cost.

Throughout this specification the word "comprise", or variations such as "comprises" or "comprising", will be understood to imply the inclusion of a stated element, integer or step, or

group of elements, integers or steps, but not the exclusion of any other element, integer or step, or group of elements, integers or steps.

The use of the expression "at least" or "at least one" suggests the use of one or more elements or ingredients or quantities, as the use may be in the embodiment of the disclosure to achieve one or more of the desired objects or results.

The foregoing description of the specific embodiments will so fully reveal the general nature of the embodiments herein that others can, by applying current knowledge, readily modify and/or adapt for various applications such specific embodiments without departing from the generic concept, and, therefore, such adaptations and modifications should and are intended to be comprehended within the meaning and range of equivalents of the disclosed embodiments. It is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation. Therefore, while the embodiments herein have been described in terms of preferred embodiments, those skilled in the art will recognize that the embodiments herein can be practiced with modification within the spirit and scope of the embodiments as described herein.

**CLAIMS:**

1. An air-thrust vehicle, said vehicle comprising:
   - a base;
   - an inverted saucer shaped body mounted on said base;
   - a plurality of sets of apertures defined at a plurality of pre-determined locations on said base and a plurality of sets of apertures defined at a plurality of pre-determined locations on said body;
   - a plurality of air-displacement mechanisms configured to draw air via pre-determined sets of apertures and force air through other pre-determined sets of apertures for providing lift for forward and backward movement and for providing horizontal pivoting of said vehicle on said base;
   - a plurality of ducts adapted to operatively connect said air-displacement mechanism to each aperture of said sets of apertures; and
   - an engine coupled to operate said air-displacement mechanism.
2. The air-thrust vehicle as claimed in claim 1, wherein said plurality of pre-determined locations are selected from the group consisting of front side, upper side, back side, front left side, rear left side, front right side, rear right side and bottom side.
3. The air-thrust vehicle as claimed in claim 1, wherein said air-displacement mechanism is selected from the group consisting of an axial compressor, a booster, a blower and a gas turbine.
4. The air-thrust vehicle as claimed in claim 1 and claim 2, wherein said air-displacement mechanism is configured to draw air via set of apertures defined at said upper side and force air via set of apertures defined at said bottom side for providing said lift to said air-thrust vehicle.
5. The air-thrust vehicle as claimed in claim 1 and claim 2, wherein said air-displacement mechanism is configured to draw air via set of apertures defined at said front side and force air via set of apertures defined at said back side for providing said forward movement to said air-thrust vehicle.
6. The air - thrust vehicle as claimed in claim 1 and claim 2, wherein said air-displacement mechanism is configured to draw air via set of apertures defined at said front left side and force air via set of apertures defined at said rear left side for turning said air-thrust vehicle in operative left direction.

7. The air - thrust vehicle as claimed in claim 1 and claim 2, wherein said air-displacement mechanism is further configured to draw air via sets of apertures defined at said front left side and said rear right side of said air-thrust vehicle and force the air via sets of apertures defined at said front right side and said rear left side for turning said air-thrust vehicle in operative left direction.
8. The air-thrust vehicle as claimed in claim 1 and claim 2, wherein said air-displacement mechanism is further configured to draw air via set of apertures defined at said front right side and force air via sets of apertures defined at said rear right side for turning said air-thrust vehicle in operative right direction.
9. The air-thrust vehicle as claimed in claim 1 and claim 2, wherein said air-displacement mechanism is configured to draw air via sets of apertures defined at said front right side and said rear left side of said air-thrust vehicle and force the air via sets of apertures defined at said front left side and said rear right side for turning said air-thrust vehicle in operative right direction.
10. The air-thrust vehicle as claimed in claim 1 and claim 2, wherein said air-displacement mechanism is configured to draw air via sets of apertures defined at said front left side and said rear left side of said air-thrust vehicle and force the air via sets of apertures defined at said front right side and said rear right side for moving said air-thrust vehicle in operative left direction.
11. The air - thrust vehicle as claimed in claim 1 and claim 2, wherein said air-displacement mechanism is configured to draw air via sets of apertures defined at said front right side and said rear right side of said air-thrust vehicle and force the air via sets of apertures defined at said front left side and said rear left side for moving said air-thrust vehicle in operative right direction.
12. The air-thrust vehicle as claimed in claim 1 and claim 2, wherein said air-displacement mechanism is configured to draw air via set of apertures defined at said back side and force air via set of apertures defined at said front side for providing said backward movement to said air-thrust vehicle.
13. The air-thrust vehicle as claimed in claim 1, wherein said sets of apertures are provided with an air filter.
14. The air-thrust vehicle as claimed in claim 1 further includes a rubber coating covering at least a portion of said body and said base.

15. The air-thrust vehicle as claimed in claim 1 further comprising a window glass disposed on at least a portion of said body.

16. The air-thrust vehicle as claimed in claim 1 is having a center of gravity located at the centre point of said base.

17. The air-thrust vehicle as claimed in claim 1 is further adapted to accommodate at least one passenger.

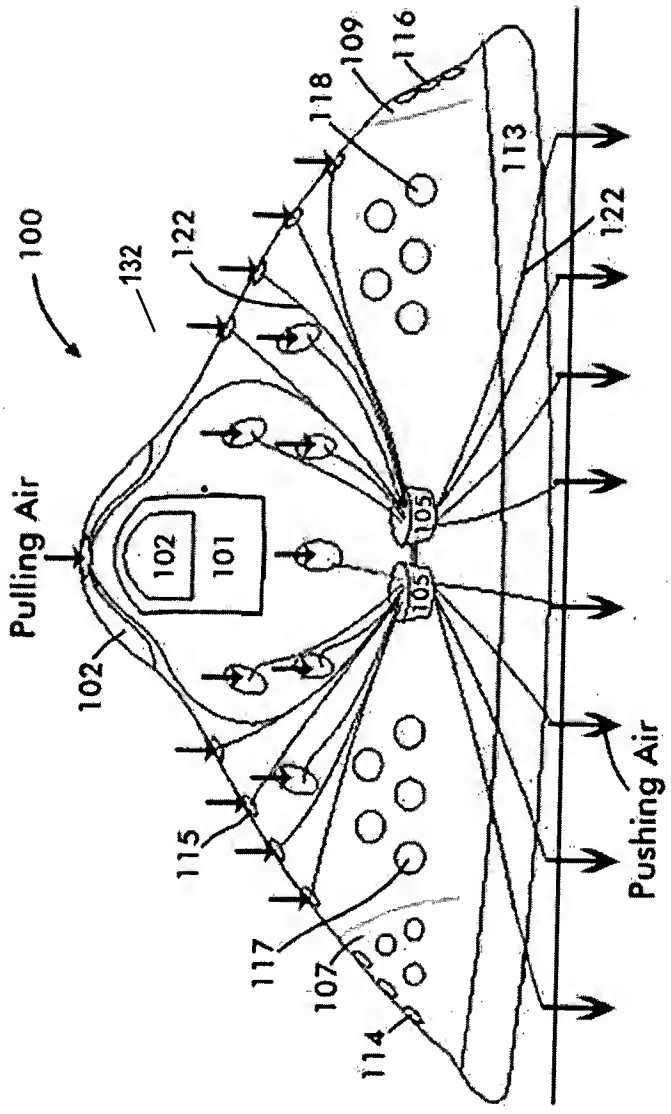

100
132
122
118
109
116
113
122
Pulling Air
102
101
105
105
102
115
117
107
114
Pushing Air

FIGURE 1A

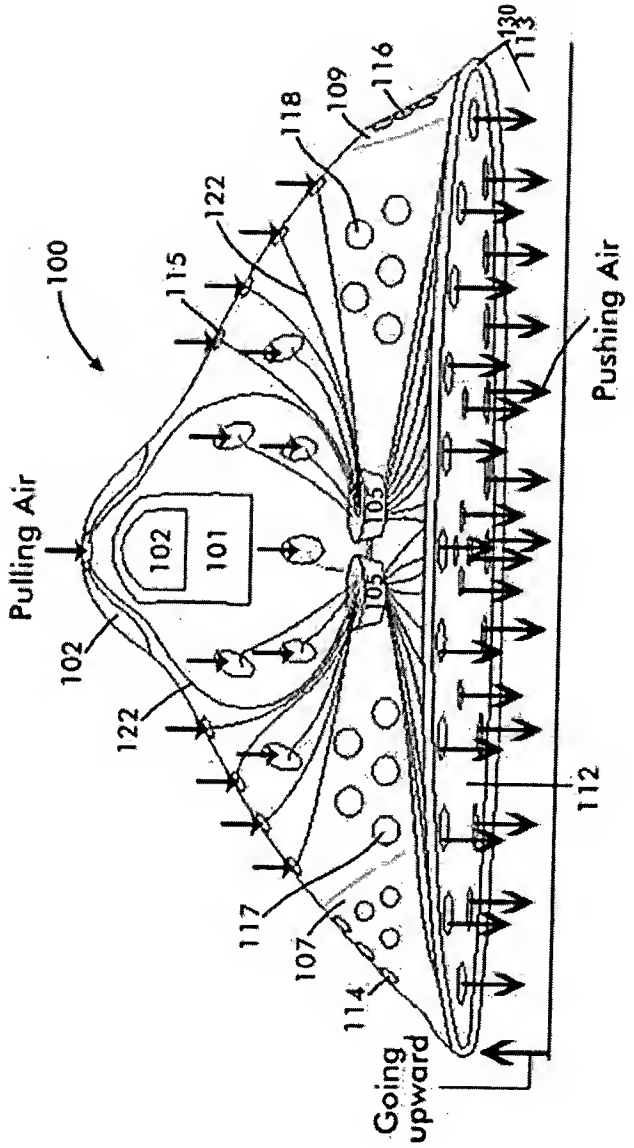

100
Pulling Air
102
101
105
105
102
122
115
122
118
109
116
130
113
Pushing Air
112
117
107
114
Going upward

FIGURE 1B

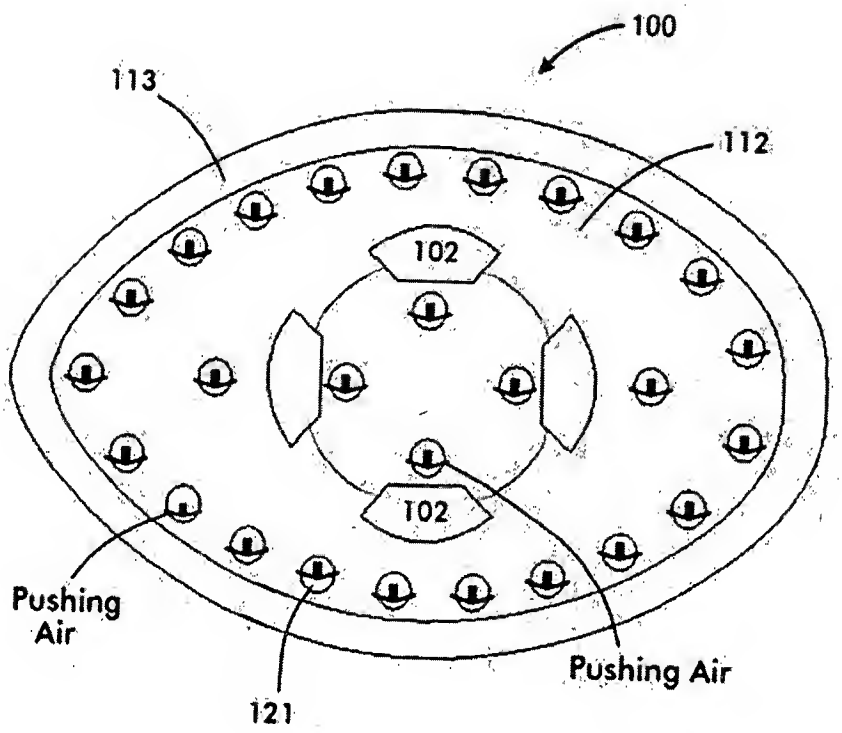



FIGURE 1C

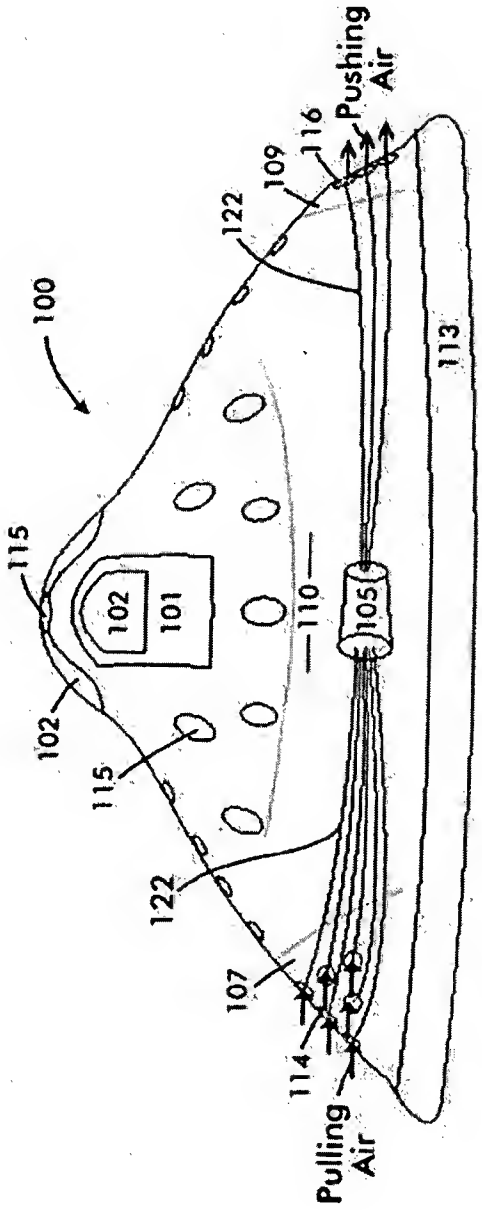

Pushing Air
116
109
122
100
113
115
102
101
110
105
102
115
122
107
114
Pulling Air

FIGURE 2A

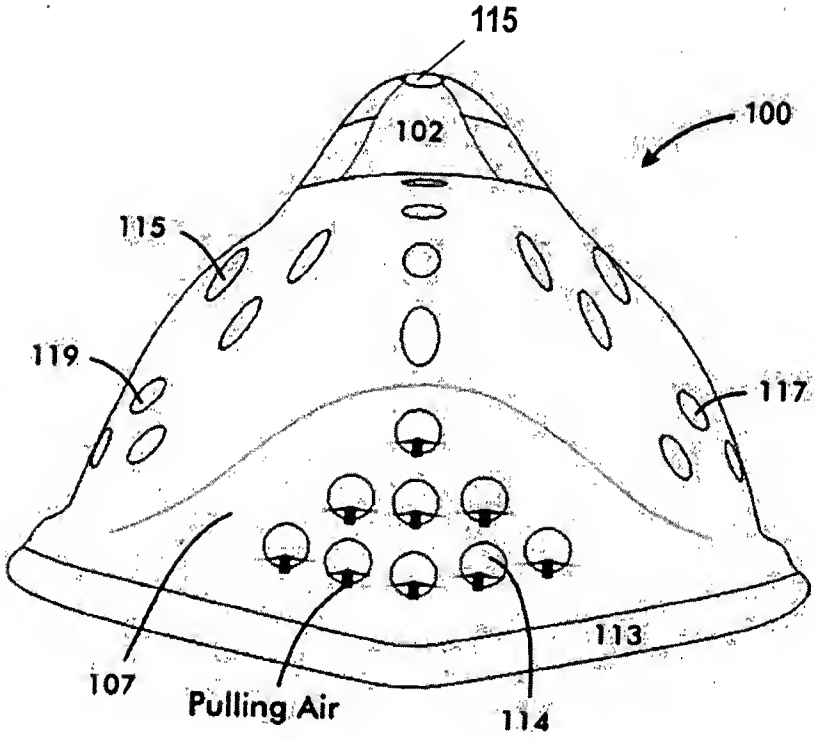



FIGURE 2B

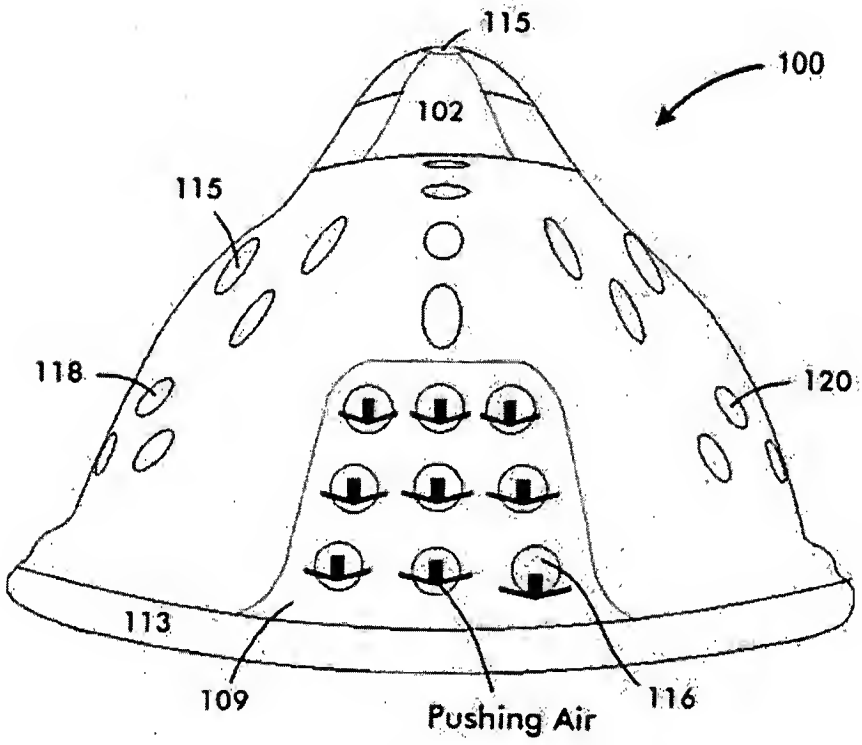
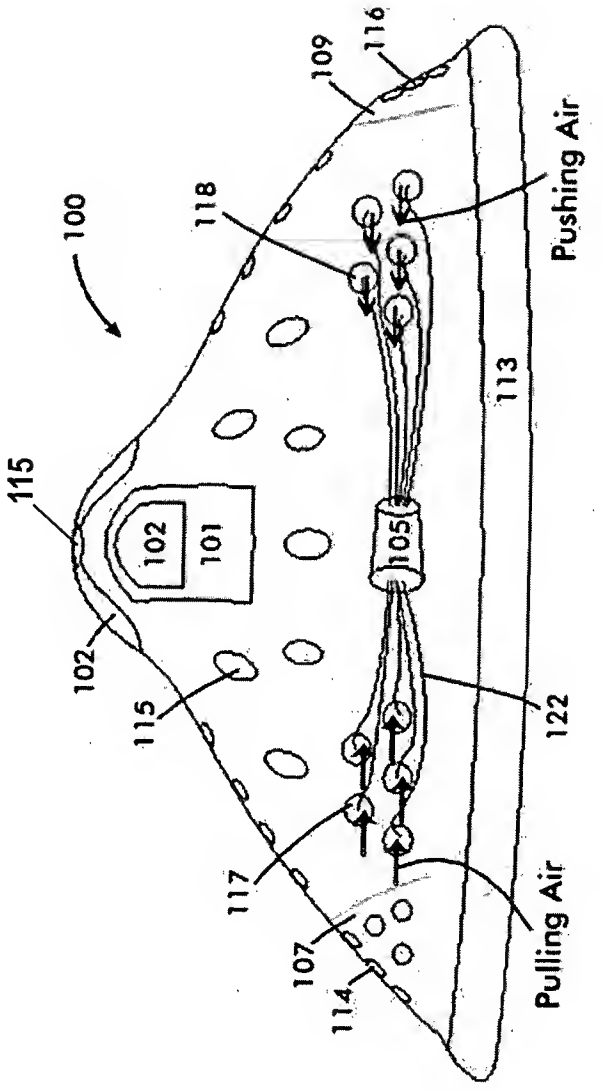



FIGURE 2C


100
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102
105
107
109
113
114
115
115
116
117
118
122
Pushing Air
Pulling Air

FIGURE 3A

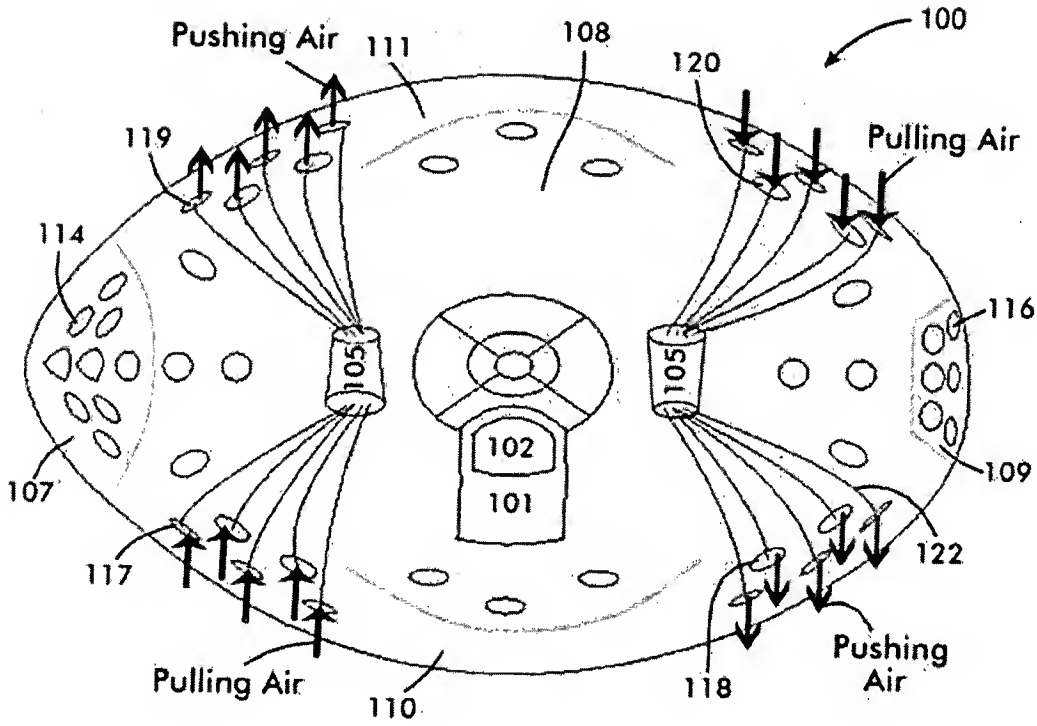
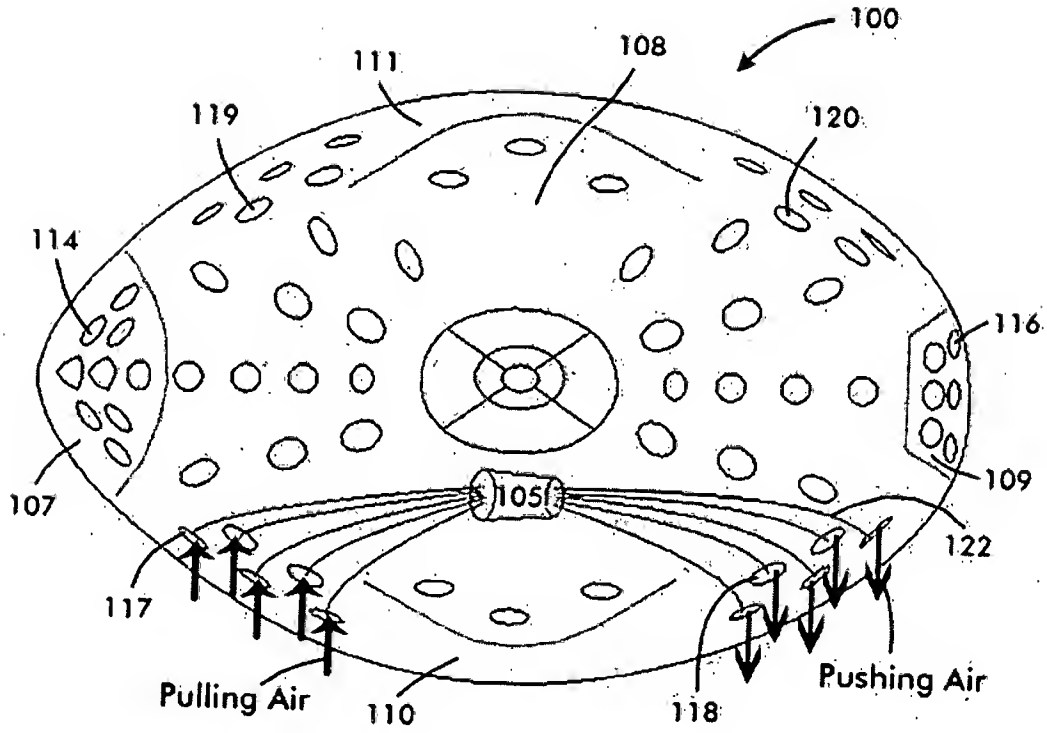

Pushing Air
111
108
100
120
119
Pulling Air
114
116
105
105
102
101
107
109
117
122
Pulling Air
110
118
Pushing Air

FIGURE 3B


100
111
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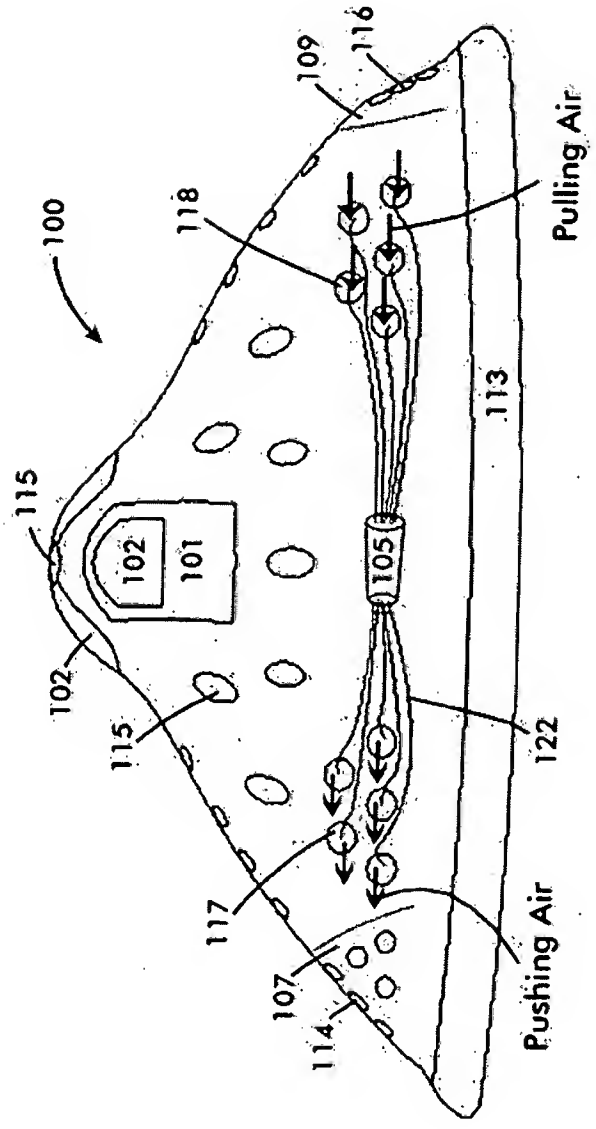
119
120
114
116
107
105
109
122
117
Pulling Air
110
118
Pushing Air

FIGURE 3C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107
109
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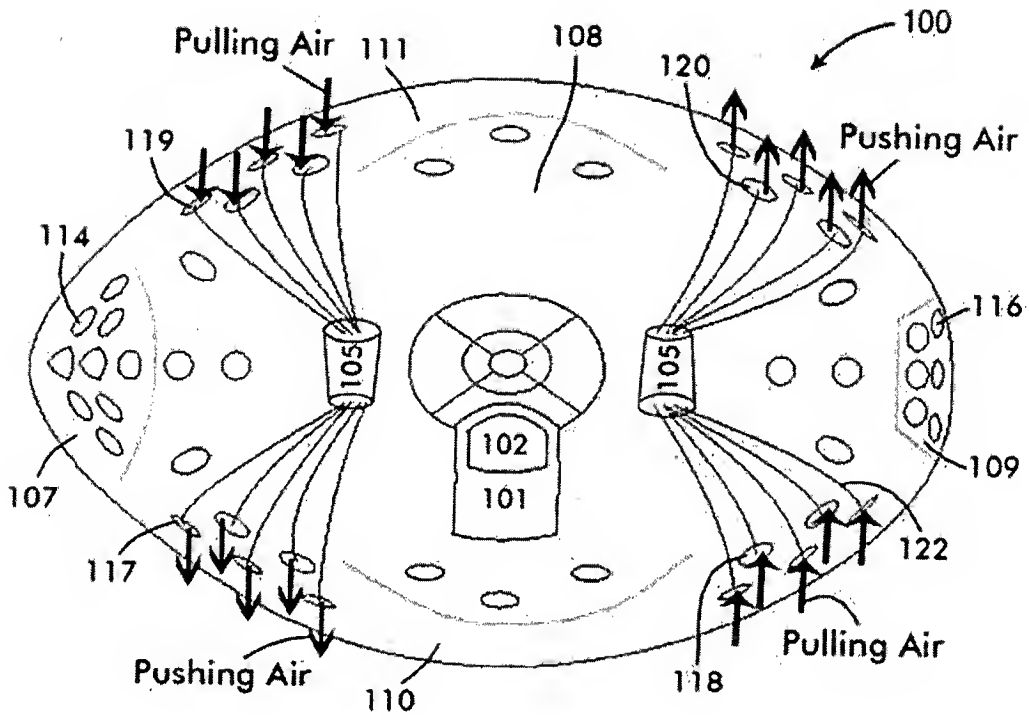
114
115
115
116
117
118
122
Pulling Air
Pushing Air

FIGURE 4A


Pulling Air
111
108
120
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Pushing Air
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116
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105
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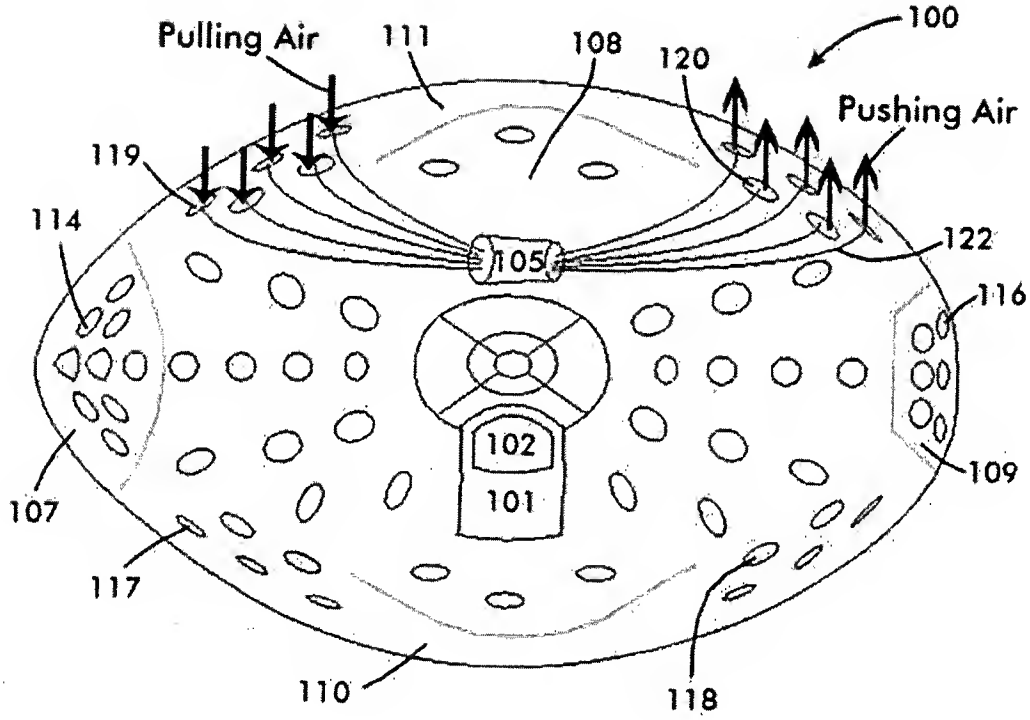
101
109
107
122
117
Pushing Air
110
118
Pulling Air

FIGURE 4B


Pulling Air
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Pushing Air
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114
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102
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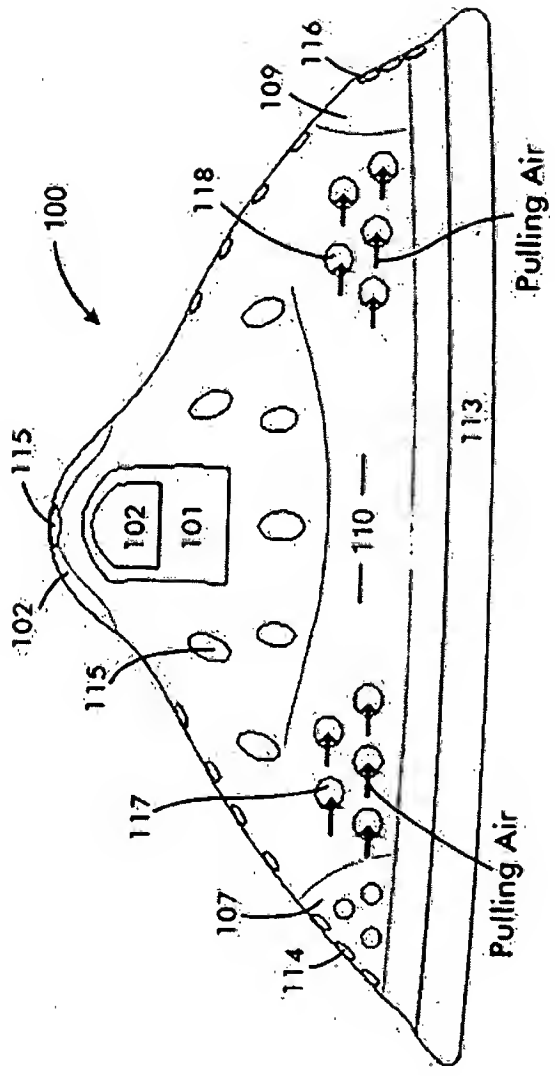
110
118

FIGURE 4C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109
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113
114
115
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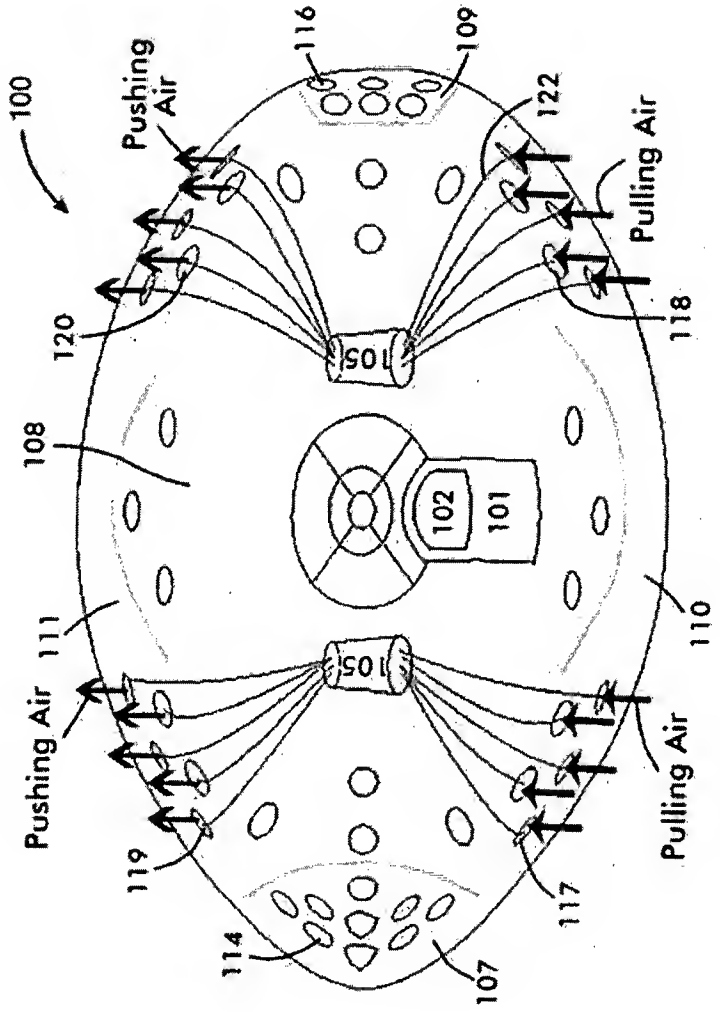
116
117
118
Pulling Air
Pulling Air

FIGURE 5A


100
Pushing Air
116
109
122
Pulling Air
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SOL
118
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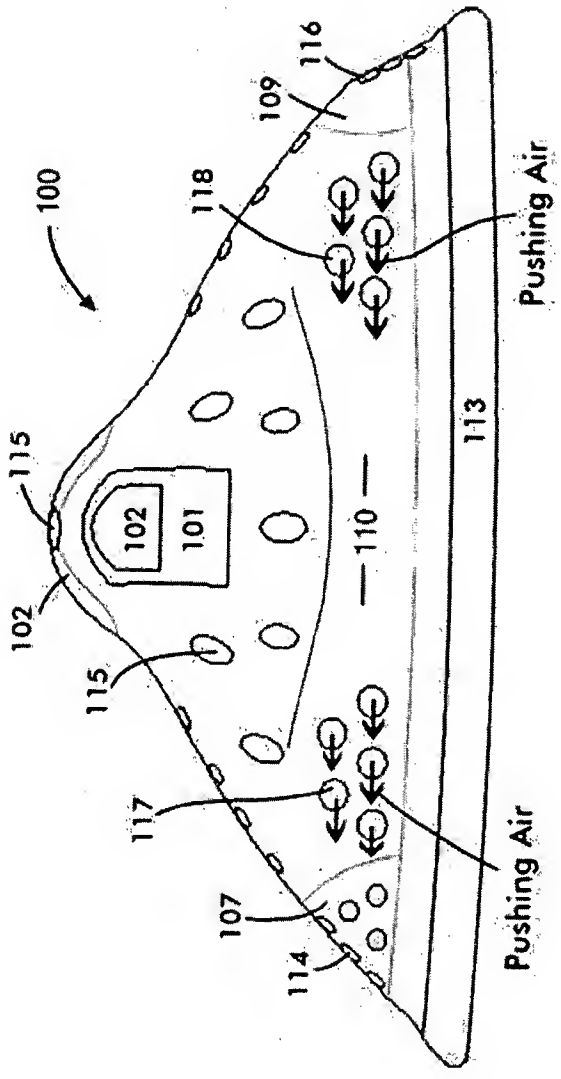
102
101
111
110
SOL
Pushing Air
Pulling Air
119
117
114
107

FIGURE 5B


100
116
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Pushing Air
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102
101
110
113
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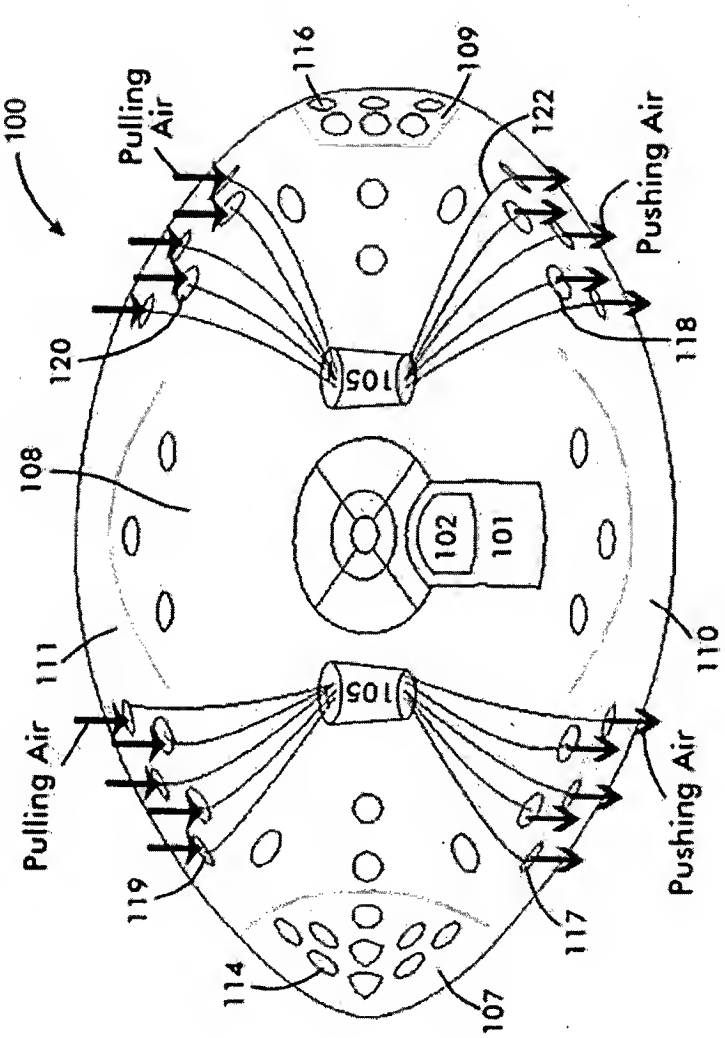
115
117
107
114
Pushing Air

FIGURE 6A


100
Pulling Air
116
109
122
Pushing Air
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118
105
108
102
101
111
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105
Pulling Air
Pushing Air
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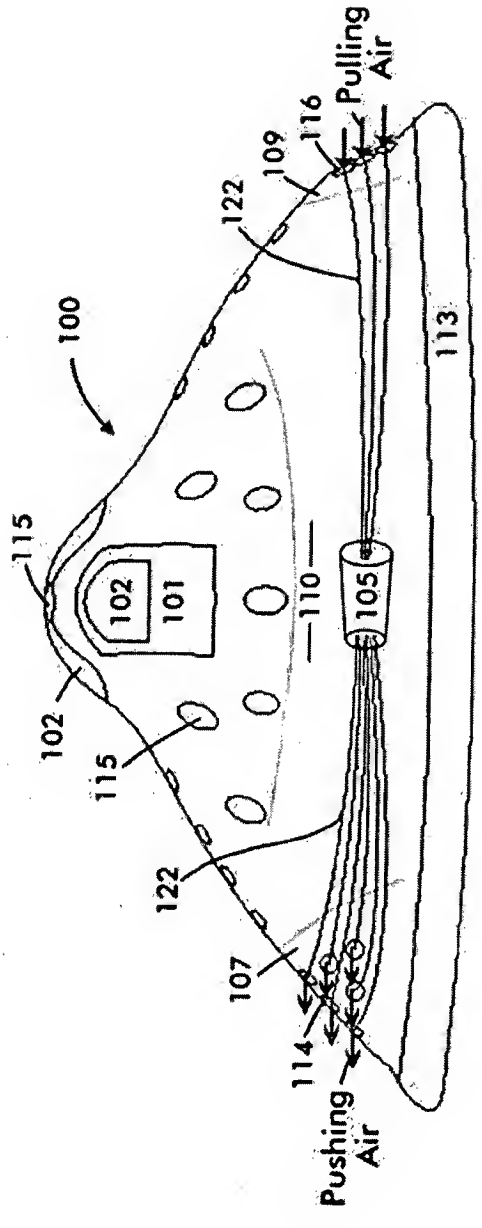
114
107

FIGURE 6B


Pulling Air
116
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122
100
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102
101
110
105
102
115
122
107
114
Pushing Air

FIGURE 7A

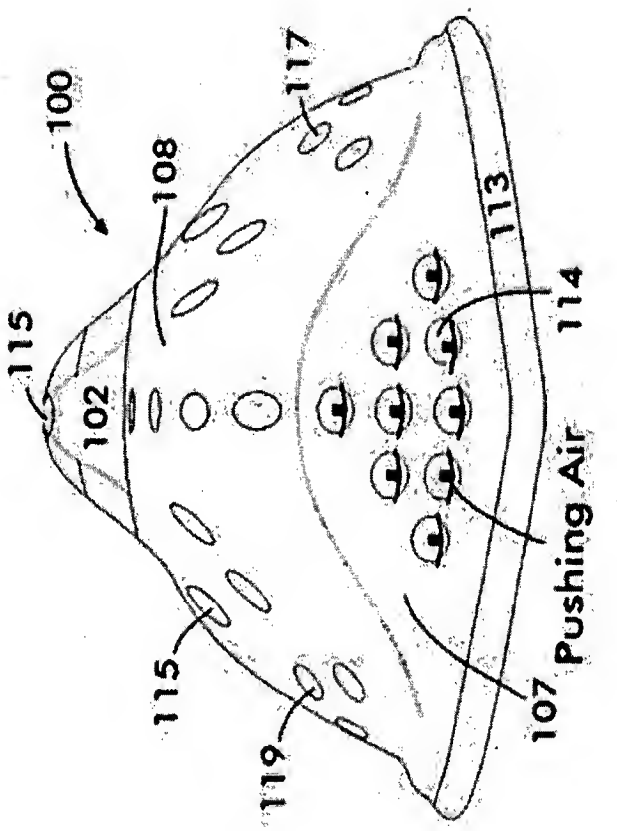


FIGURE 7B

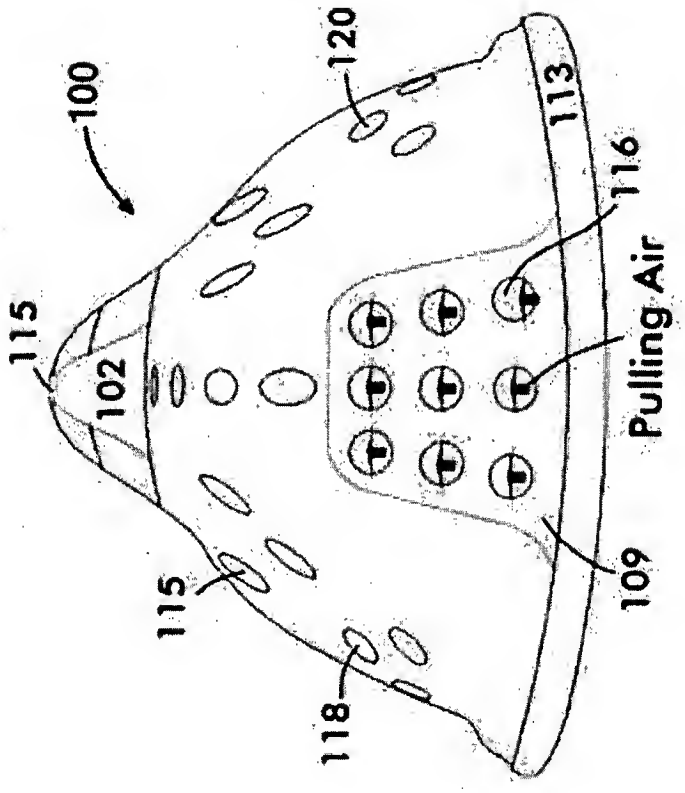


FIGURE 7C

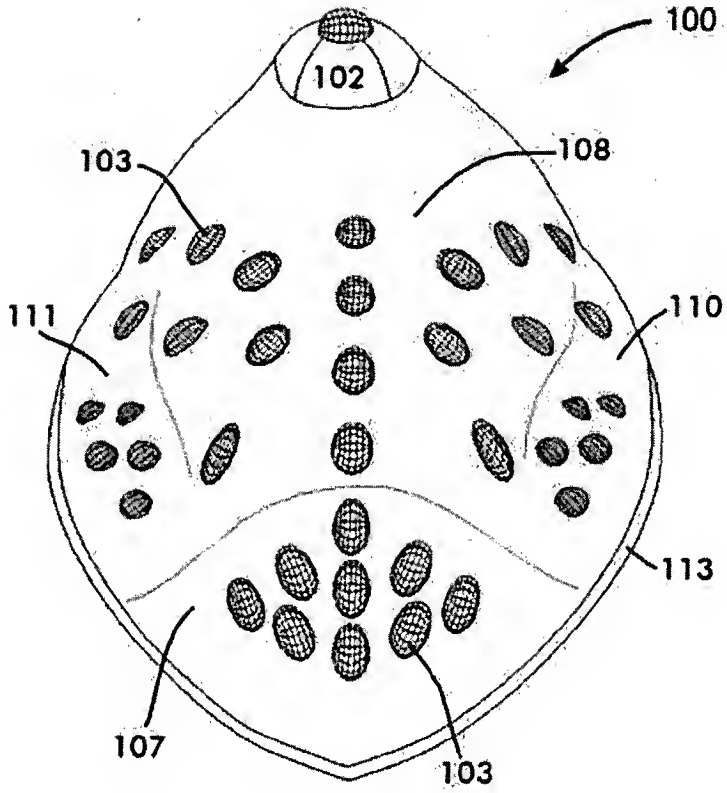


FIGURE 8A

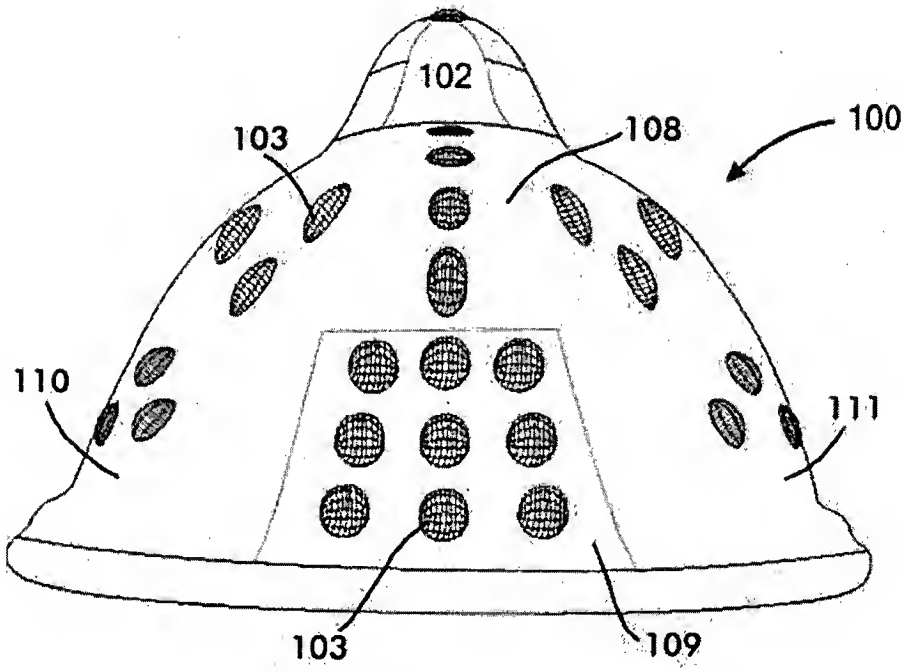


FIGURE 8B

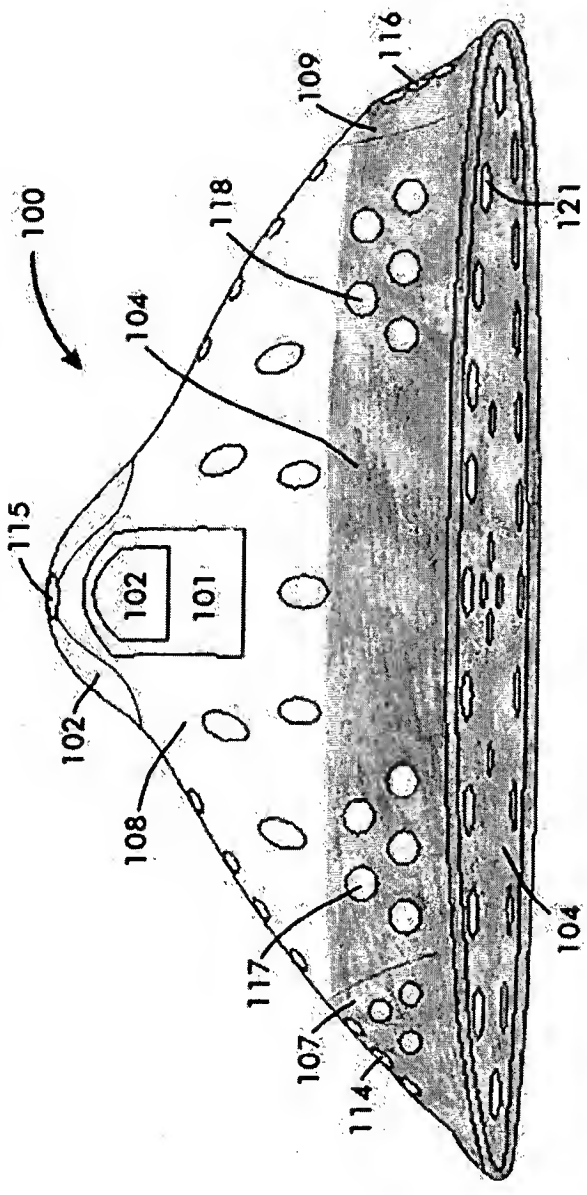


FIGURE 9A

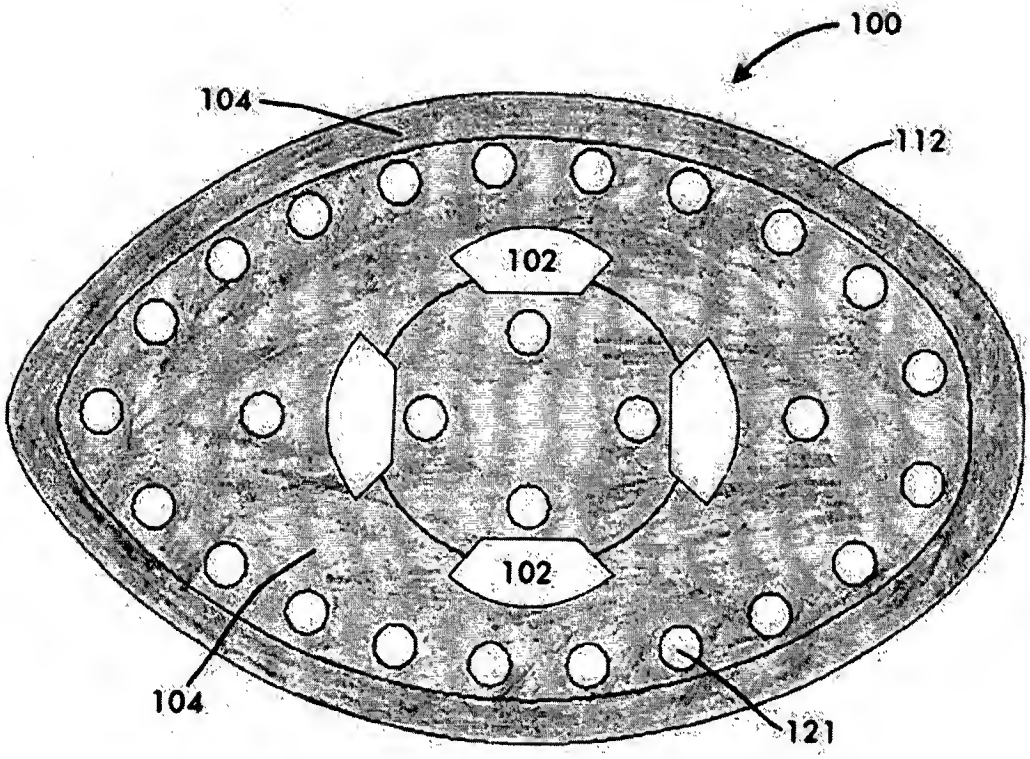


FIGURE 9B

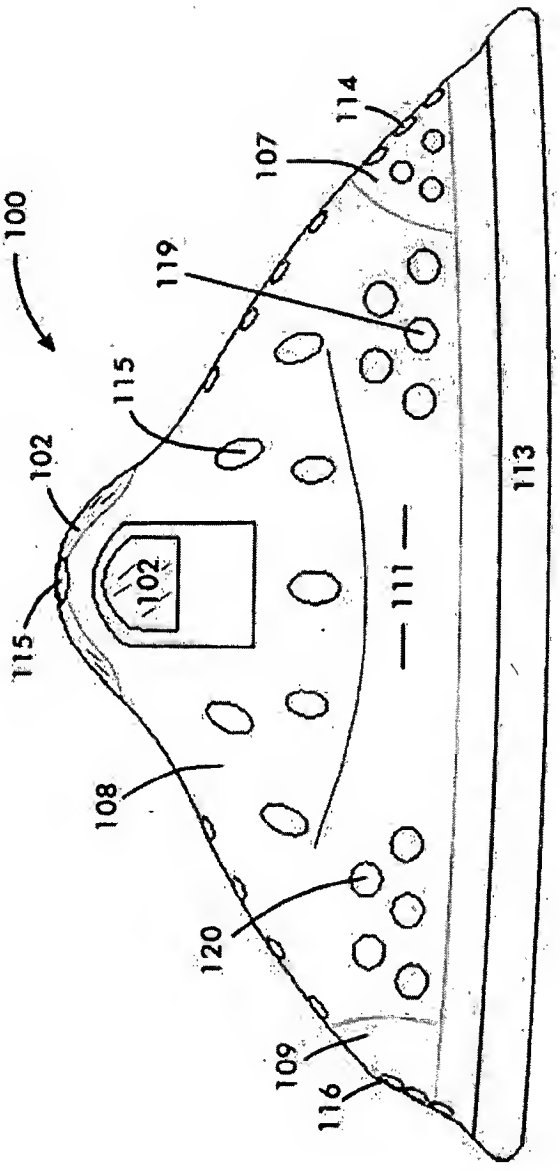


FIGURE 10A

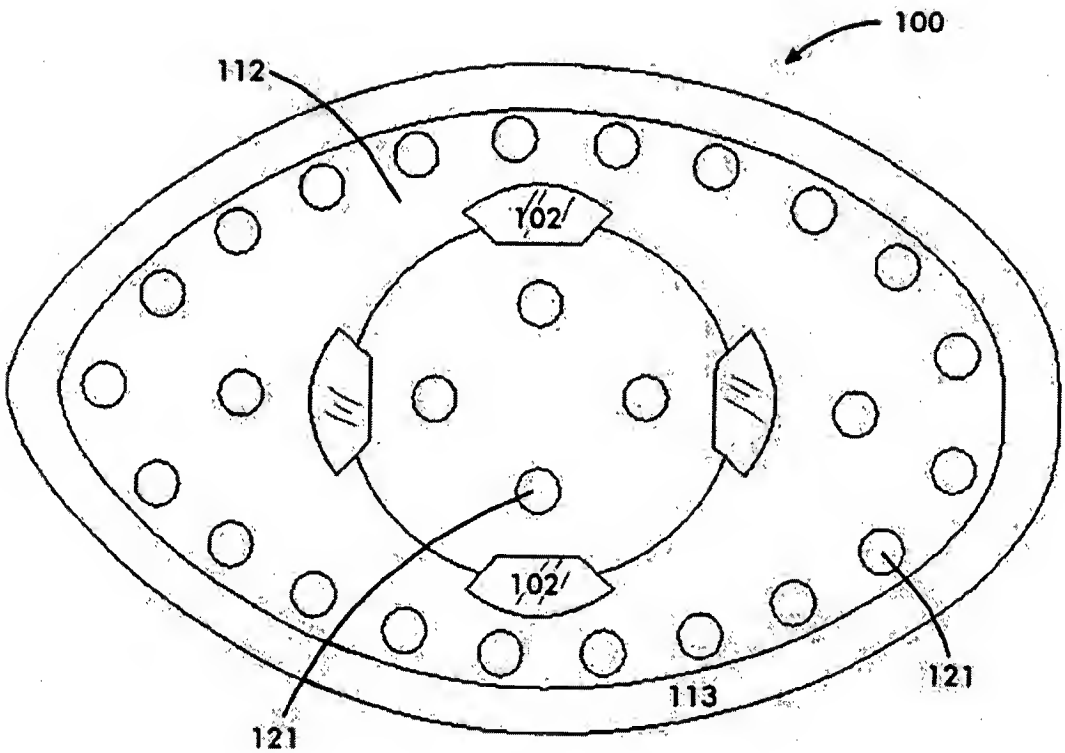


FIGURE 10B

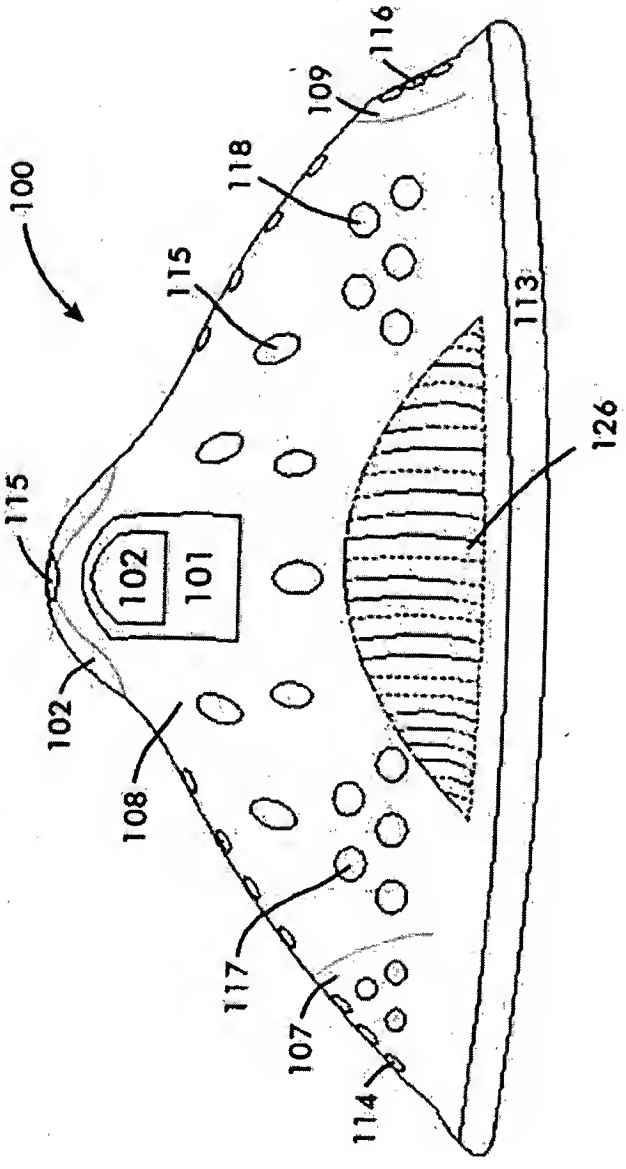


FIGURE 11A

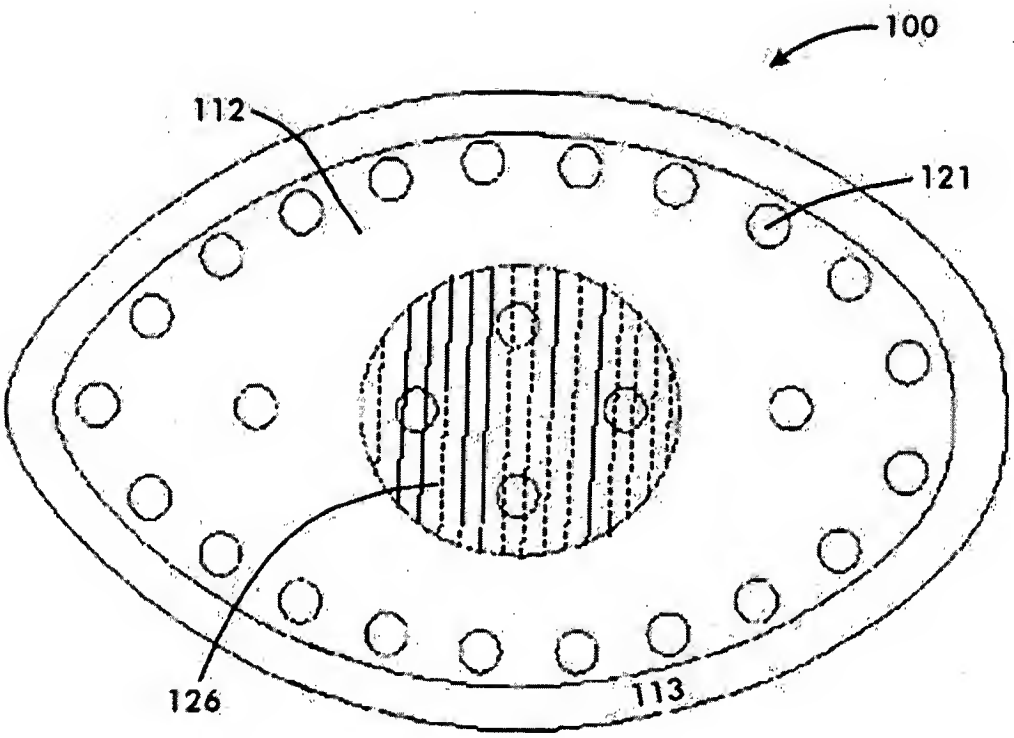


FIGURE 11B

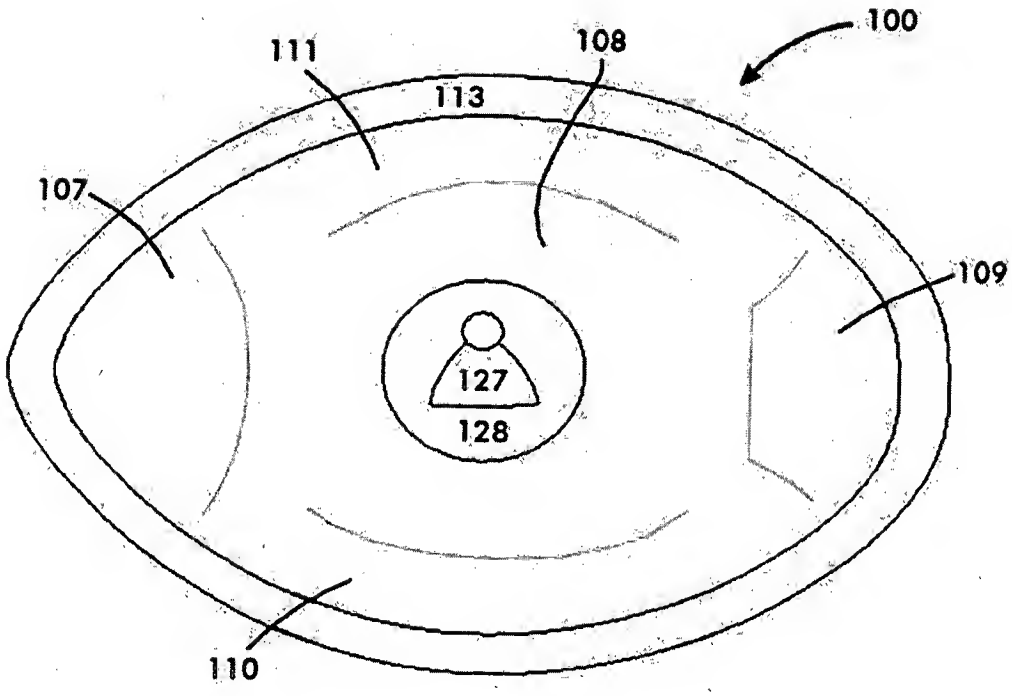


FIGURE 12A

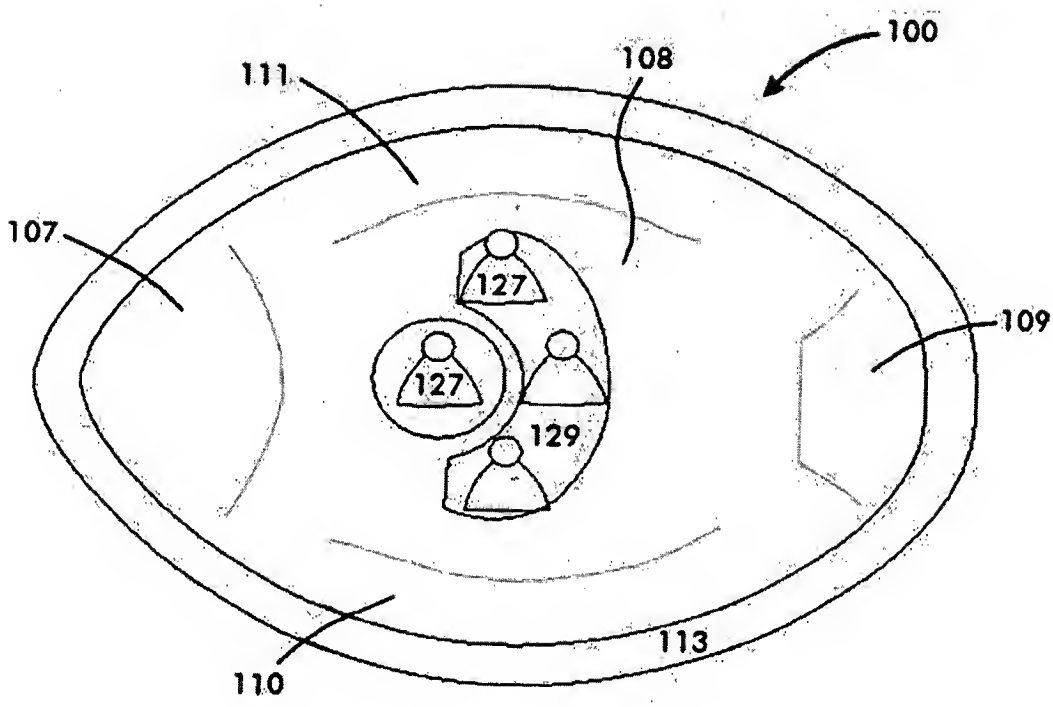


FIGURE 12B

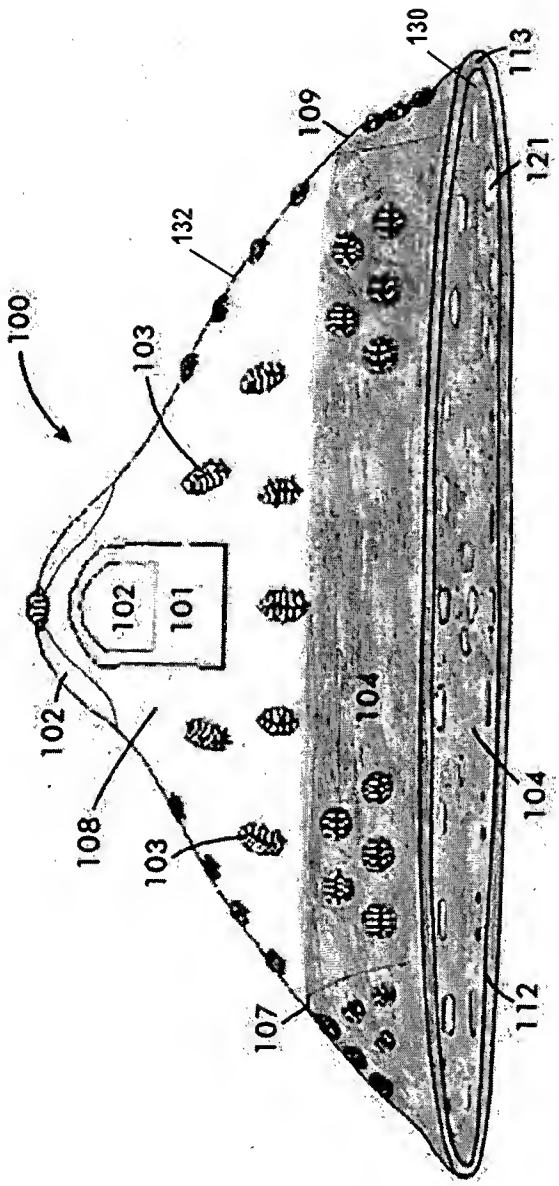


FIGURE 13A

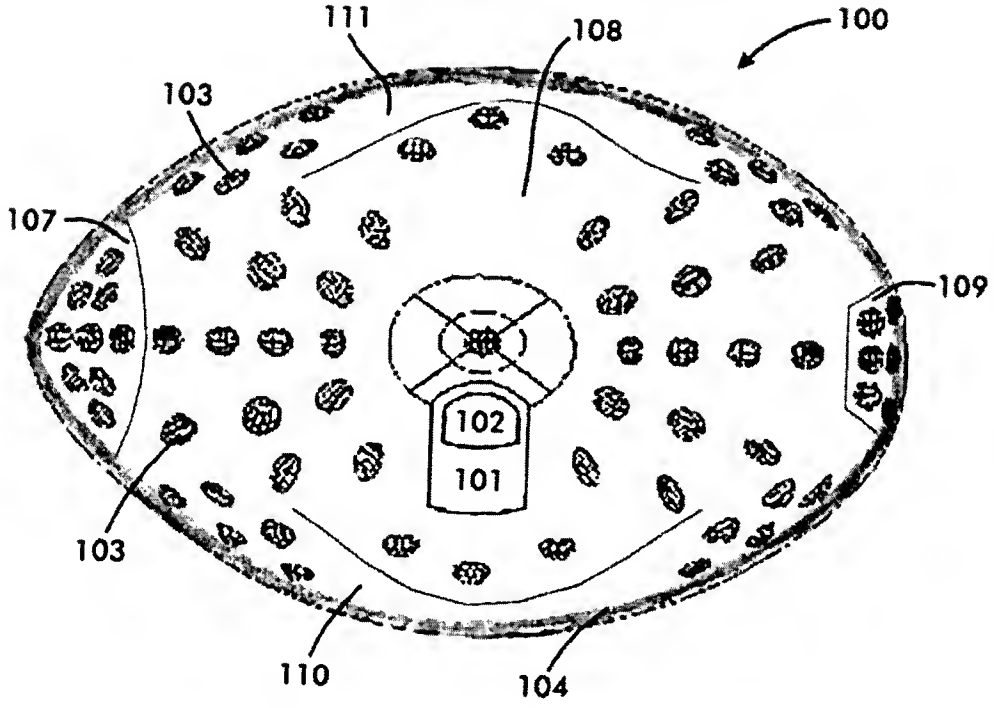


FIGURE 13B

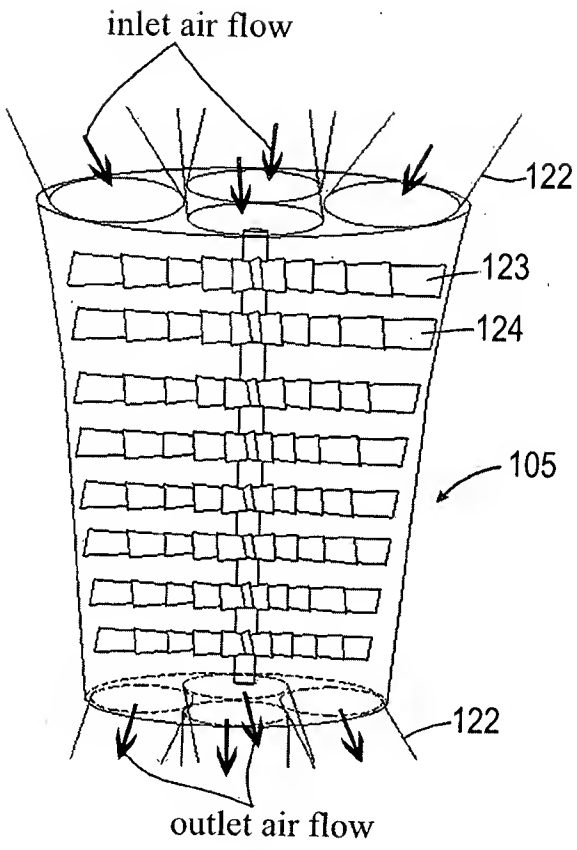


FIGURE 14

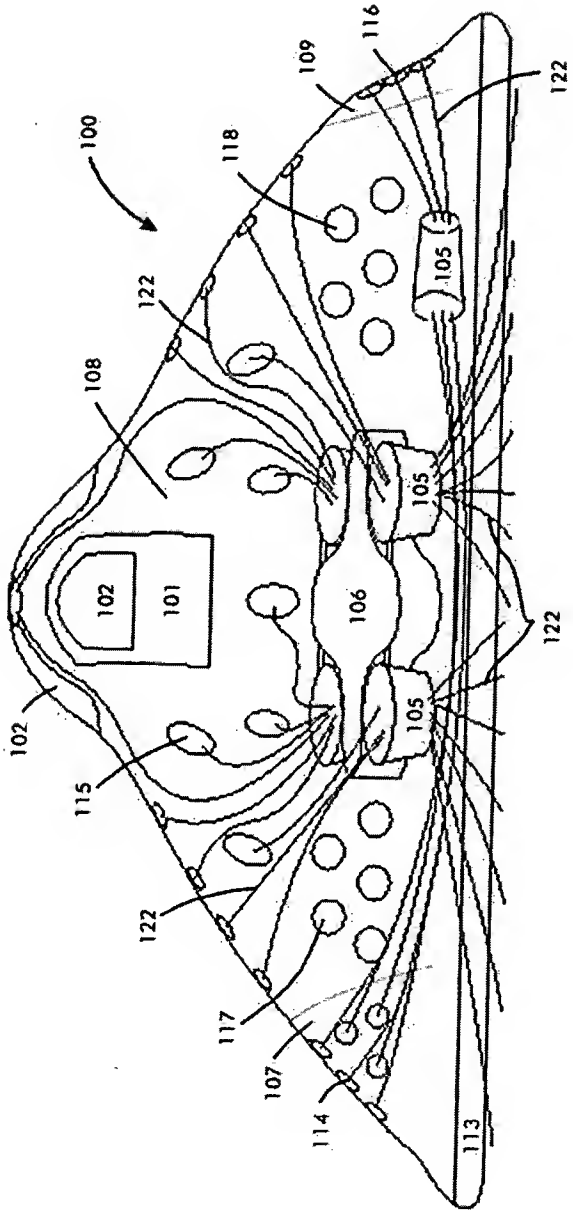
100
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FIGURE 15A

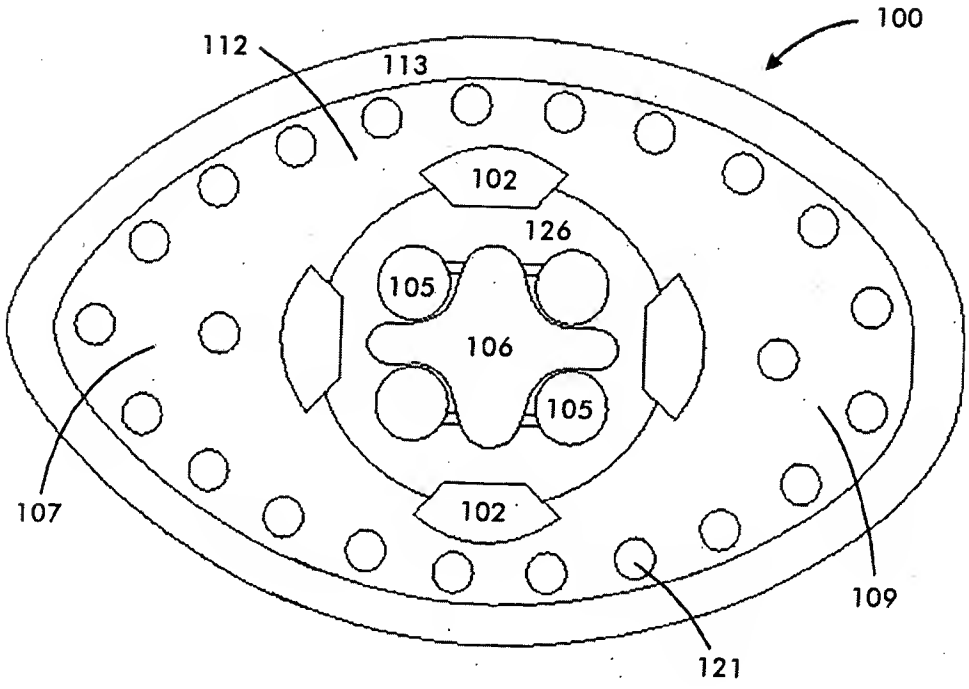


FIGURE 15B

# INTERNATIONAL SEARCH REPORT

International application No.
PCT/IN2013/000566

**A. CLASSIFICATION OF SUBJECT MATTER**

See the extra sheet

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC: B64C 15/-

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPODOC,WPI,CNPAT,CNKI,TWABS; air, thrust, vehicle, aircraft, saucer, shape, engine, intake, inlet, hole, open, passage, move, turn.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| Y | CN 101857085 A (LIU, Chun) 13 October 2010 (13.10.2010)<br>description, paragraphs [0072] to [0098] and figures 1 to 8 | 1-17 |
| Y | CN 101628626 A (SHANG, Demin) 20 January 2010 (20.01.2010)<br>description, page 6, line 7 to page 16, line 23 and figures 1 to 10 | 1-17 |
| Y | CN 1403341 A (JIN, Hongkui) 19 March 2003 (19.03.2003)<br>description, page 2, line 12 to page 3, line 14 and figures 1 to 4 | 1-17 |
| Y | CN 1197751 A (ZHOU, Bin) 04 November 1998 (04.11.1998)<br>description, page 4, line 10 to page 6, line 6 and figures 1 to 5 | 1-17 |
| Y | US 2005230525 A1 (PATERRO, V. F. C.) 20 October 2005 (20.10.2005)<br>description, paragraphs [0033] to [0085] and figures 1 to 7 | 1-17 |
| PX | IN 201203988 I4 (MAHAJAN MAHESH DATTATRAY) 09 November 2012 (09.11.2012)<br>Claims 1-17 | 1-17 |

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"document member of the same patent family

| Date of the actual completion of the international search | Date of mailing of the international search report |
|---|---|
| 10 February 2014 (10.02.2014) | **06 Mar. 2014 (06.03.2014)** |
| Name and mailing address of the ISA/CN<br>The State Intellectual Property Office, the P.R.China<br>6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088<br>Facsimile No. 86-10-62019451 | Authorized officer<br>HUANG,Zhenshan<br>Telephone No. (86-10)62412864 |

Form PCT/ISA /210 (second sheet) (July 2009)

# INTERNATIONAL SEARCH REPORT
## Information on patent family members

International application No.
PCT/IN2013/000566

| Patent Documents referred in the Report | Publication Date | Patent Family | Publication Date |
|---|---|---|---|
| CN 101857085 A | 13.10.2010 | None | |
| CN 101628626 A | 20.01.2010 | None | |
| CN 1403341 A | 19.03.2003 | None | |
| CN 1197751 A | 04.11.1998 | None | |
| US 2005230525 A1 | 20.10.2005 | None | |
| IN 201203988 I4 | 09.11.2012 | None | |

# INTERNATIONAL SEARCH REPORT

International application No.
PCT/IN2013/000566

**A. CLASSIFICATION OF SUBJECT MATTER**

B64C 15/00 (2006.01) i
B64C 15/02 (2006.01) i